



CROSS-BORDER DISPUTES IN AI-GENERATED TRADE SECRETS: JURISDICTION AND ENFORCEMENT ISSUES

Anjali Upadhyay¹, Prof. (Dr.) S.N. Jaisal²

¹ Research Scholar, Faculty of Law, Dr. Bhimrao Ambedkar University, Agra

² Faculty of Law, Agra College, Agra

Abstract

The advent of Artificial Intelligence (AI) as a means of producing commercially useful information has changed the very nature of what can be called a trade secret. AI systems now autonomously generate algorithms, predictive models and proprietary datasets that are of great economic importance. Nevertheless, the process of such AI-generated trade secrets protection becomes extremely complicated in the cross-border context because of the ambiguities in jurisdiction and the enforcement of such trade secrets. Conventional legal frameworks are not sufficient to deal with disputes over decentralized data systems, multi-jurisdictional operations, and non-human creators. This paper will discuss the conceptual and legal aspects of AI-generated trade secrets with regard to jurisdictional issues and barriers to enforcement. It further compares the comparative legal approaches in major jurisdictions and makes recommendations on harmonizing legal standards among various international jurisdictions in this emerging field.

Keywords: Artificial Intelligence, Trade Secrets, Cross-border Disputes, Jurisdiction, Enforcement, Intellectual Property Law

1.INTRODUCTION

Artificial Intelligence (AI) has become a game changer in the global economy, which has fundamentally changed the manner in which businesses create, administer and safeguard valuable information¹. The

¹ Abad, A. A. (2024). Artificial intelligence and the future of international trade law and dispute settlement. *Contemp. Asia Arb. J.*, 17, 35.

advanced AI systems, especially those grounded in machine learning, deep learning, and neural networks, are capable of autonomously producing high-value outputs, such as predictive models, deep learning, and neural networks. These outputs frequently fulfil the requirements of trade secrets based on confidentiality, commercial usefulness and competitive advantage. But unlike the traditional trade secrets, which are the result of human ingenuity, the AI-generated outputs result in the significant legal ambiguity, especially when it comes to the ownership, authorship, and attribution of rights².

The growing dependency on AI-based technologies has contributed to the intricacy of safeguarding confidential data in a globalized digital world. The use of AI systems is often configured in cloud infrastructures, distributed computing networks, and cross-border data flows, which blur the geographical boundaries traditionally used to establish the legal jurisdiction. Because of this, the trade secrets produced by AI can both be in different jurisdictions and violate different laws at the same time. This gives rise to a fragmented legal environment where the businesses are left to operate in an uneven legal environment with inconsistent national laws and enforcement systems.

Moreover, the lack of standardized international rules and regulations on AI-generated trade secrets has enhanced the threat of conflicts³. The current intellectual property regimes, such as the trade secret laws, were developed at a time when human agency played a key role in creation and control. Such frameworks are becoming less and less sufficient to the decentralized, autonomous, and information-driven nature of AI systems. As a result, cross-border conflicts based on the use of AI-generated trade secrets pose important questions about jurisdiction, the applicable law, the enforcement of the rights and the recognition of the foreign judgment.

The purpose of this paper is to critically examine these emerging legal issues through the lens of the intersection of AI technology and protection of trade secrets in a cross-border setting. It is concerned with jurisdictional ambiguities, enforcement impediments, and comparative legal approaches in different jurisdictions and suggests policy and legal changes to solve these problems.

² Bhushan, T., & Tahiru, H. A. (2025). Protecting AI-generated inventions under the UK's IP regulatory regime. *Journal of Intellectual Property Rights*, 30(1), 86-100

³ Celestin, P. (2024). The Future Of Intellectual Property Law In The Digital Age: How Companies Are Protecting Their Innovations In A Globalized Market. *Brainae Journal of Business, Sciences and Technology*

1.1 Evolution of Trade Secrets in the AI Era

Trade secrets have traditionally been considered to include secret business information in the form of formulas, processes, designs, and customer data that gives a competitive advantage. The definition of trade secrets has broadened with the emergence of AI to incorporate algorithmic output, training data and automated decision-making algorithms. In contrast to traditional trade secrets, AI-generated outputs are dynamic and constantly evolve and are often based on large and diverse datasets obtained in various jurisdictions. This development questions the legal orthodoxy of secrecy, ownership and control.

1.2 Globalization and Cross-Border Data Flows

The worldwide digital infrastructure has made cross-border data flow unhindered, which is crucial in training and operating AI systems. Nevertheless, this interrelated setting makes it hard to establish jurisdiction in trade secret cases. The data can be gathered in one country, processed in another and stored in various locations at the same time⁴. This dispersion can pose a legal uncertainty because different jurisdictions might assert jurisdiction over the same dispute, which creates a legal uncertainty, and increases the risk that a particular dispute will be subject to jurisdiction in multiple jurisdictions, thus leading to conflicting legal outcomes and a heightened risk of litigation.

1.3 Need for Legal Adaptation and Harmonization

The issues of AI-generated trade secrets emphasize the necessity of the legal adaptation of both the national and international levels. Current trade secret legislation needs to transform to cover such problems as AI authorship, rights of ownership, and international application. Also, an increasing sense of need to cooperate internationally and harmonize of legal standards to achieve uniform protection of trade secrets across jurisdictions. In the absence of such reforms, it is possible that the businesses might experience a lot of obstacles in protecting their proprietary innovations in AI in the global marketplace.

2. CONCEPTUAL FRAMEWORK OF AI-GENERATED TRADE SECRETS

Trade secrets as a concept have taken a tremendous shape with the introduction of Artificial Intelligence (AI). In contrast to the traditional confidential business information created under the guidance of human

⁴ Crouch, D. (2024). Using intellectual property to regulate artificial intelligence. *Mo. L. Rev.*, 89, 781.

knowledge, the outputs of AI introduce new aspects of complexity in terms of creation, ownership, and legal protection. This section provides the theoretical and legal framework that one should consider to understand the dynamic nature of trade secrets in the AI-driven environment.

2.1 Understanding Trade Secrets

Trade secrets are a very important type of intellectual property that includes confidential business information which gives its owner a competitive edge⁵. This kind of information can encompass formulas, practices, processes, designs, instruments or collections of data not known to the outside world and subject to reasonable efforts to keep them secret.

On the international level, the protection of trade secrets is mainly regulated by the TRIPS Agreement that establishes three major requirements: the information has to be secret, must have commercial value because of being secret, and must be subject to reasonable steps undertaken by its owner to keep the information confidential. Such criteria are the foundations of trade secret protection in each jurisdiction, but they might be interpreted differently in different domestic legal systems.

The meaning of trade secrets in the context of AI goes beyond the information that does not change and is instead generated dynamically and continuously evolves through algorithmic learning processes. This change brings the traditional ideas of secrecy and control into question and demands the reconsideration of legal standards.

2.2 AI as a Generator of Trade Secrets

Artificial Intelligence systems (and especially those using machine learning and deep learning methods) can autonomously produce valuable and commercially sensitive outputs. They are used to process large datasets to detect patterns, streamline decision-making, and generate insights that are often proprietary in nature. Such outputs can be in the form of predictive analytics models, proprietary algorithms, and sophisticated business optimization strategies.

⁵ Dave, E., Mishra, R., & Yadav, A. (2025). AI Regulation and Governance: Comparative Analysis of Legal Frameworks Across Jurisdictions.

In comparison to traditional trade secrets, which can be directly traced to human effort, the outputs of AI may manifest without being directly attributed to human effort. This has some fundamental questions as to whether such outputs can be legally considered as a trade secret and under what circumstances⁶. However, when such outputs meet the set requirements of secrecy, commercial value, and reasonable protection, they may be regarded as trade secrets regardless of their nonhuman source.

The increasing reliance on AI-generated knowledge assets underscores the need to broaden the conceptual understanding of trade secrets to accommodate technological advancements.

2.3 Ownership and Attribution Issues

The issue of ownership and attribution is one of the most complicated questions of the sphere of AI-generated trade secrets. Traditional intellectual property systems are based on human authorship and creativity, whereas AI systems are autonomous or semi-autonomous, and often multistakeholder in their growth and implementation.

Examples of potential claimants to AI-generated trade secrets include developers, who design and train the AI systems, organizations, who implement and use the systems in commercial activities, and data providers, who contribute to the datasets used to train. These stakeholders, in most occasions, might be in various jurisdictions, which makes the matter even more complicated.

There is great uncertainty around the ownership, as there are no clear and universally accepted rules of law, which regulate ownership. This indistinctness not only enhances the chances of conflicts but also raises the issue of accountability and liability in cases of misappropriation. It is therefore urgent that legal frameworks be established that would be instrumental in dealing with the attribution of rights to AI-generated outputs.

2.4 Nature of AI-Driven Confidential Information

Trade secrets created by AI have distinct features that make them the difference between them and other types of confidential information. Such outputs are dynamic by nature as they are constantly changing

⁶ Dhabu, A. C. (2024). Legal implications of artificial intelligence in cross-border transactions-navigating international trade law.

due to the continuous processes of learning. In contrast to the static trade secrets, the information created by AI can evolve over time and it is hard to define the exact limits of the information generated by AI.

Moreover, this data is usually stored and processed within digital spaces, and frequently across a variety of geographic locations through cloud-based solutions⁷. This decentralization of storage makes it difficult to create control and secrecy especially in a cross-border situation.

The complexity and opaqueness is also another characteristic attribute of AI-powered confidential information. The internal workings of AI models, particularly deep learning systems are usually hard to read, which then results in a difficulty in determining the specific elements that comprise a trade secret. This is further complicated by the lack of transparency which makes it difficult to protect and enforce the law.

These features require the reconsideration of the conventional trade secret principles to make sure that they can be relevant in the environment marked with the emergence of highly dynamic AI technologies.

3. JURISDICTIONAL CHALLENGES IN CROSS-BORDER DISPUTES

The current high rate of Artificial Intelligence (AI) technology development has made it quite difficult to establish the jurisdiction in trade secret cases. In contrast to the traditional disputes, which, in most cases, are limited to specific territorial boundaries, AI-generated trade secrets exist in decentralized digital environments that transcend national borders. This has put a lot of pressure on the courts in determining the proper venue, the law to be applied and the area of jurisdiction. This section critically addresses the jurisdictional complexities that emerge during the cross-border dispute involving trade secrets that are generated by AI.

3.1 Determining Jurisdiction

Identification of jurisdiction is a basic measure in solving any legal disputes. Courts, in the context of misappropriation of trade secrets in cross-border trade, generally adhere to factors which are traditionally

⁷ Du, J. Y., & Li, P. Y. (2025, May). Legal Regulation of Knowledge Distillation: From a Trade Secret Perspective. In JSIAI International Symposium on Artificial Intelligence (pp. 36-48). Singapore: Springer Nature Singapore.

connecting like the location where the misappropriation took place, the residence of the place of business of the defendant, and the jurisdiction of the harm or economic loss suffered.

Nevertheless, these conventional requirements are getting less and less adequate when applied to AI systems. Trade secrets generated by AI are usually created, processed, and stored across various jurisdictions at the same time using cloud computing infrastructures. As an example, the data can be gathered in a particular state, processed by an artificial intelligence system in a different state, and accessed or stolen in a third jurisdiction. The piecemeal digital space erases the geographical nexus needed to establish jurisdiction.

As a result, overlapping or conflicting grounds may be used by the courts to assert jurisdiction, and the result is parallel proceedings in different jurisdictions. It does not only complicate the litigation process, but also provokes the issues of conflicting decisions and enforcement challenges⁸.

3.2 Conflicting Legal Frameworks

The fact that national legal systems differ with regard to the protection of trade secrets is one of the greatest issues in the cross-border disputes. Various jurisdictions have different definitions, standards and enforcement mechanisms, which lack consistency.

An example is the Defend Trade Secrets Act, which grants civil remedies and in some instances extraterritorial jurisdiction, which the United States is providing. The European Union, however, is bound by the EU Trade Secrets Directive which attempts to unify protection of trade secrets across the member states whilst preserving flexibility in national protection⁹. Conversely, India lacks a specific law to cover trade secrets and instead it has depended on a contractual obligation, equitable principle and common law remedies.

These discrepancies result in unequal adjudicative rulings in cross-border disputes. What is considered misappropriation in one jurisdiction may not be considered a misappropriation in another jurisdiction.

⁸ Kalwani, M. (2024). 17 Navigating Challenges and Proposing Solutions. Intellectual Property Rights and Competition Law in India.

⁹ Hazarika, K., & Saikia, B. ADR in Commercial and Business Disputes: Corporate Strategies, AI Integration and Cross-Border Considerations.

Likewise, the remedies; be it injunctions, damages, or a criminal penalty, vary greatly further complicating the resolution of disputes.

3.3 Forum Shopping and Strategic Litigation

The presence of divergent legal regimes promotes parties to submit to the jurisdictions that appear to provide good legal terms or procedural benefits. Forum shopping is especially widespread in the situation involving AI-generated trade secrets as a result of the multi-jurisdictional character of online activities.

Although the forum selection can give a strategic advantage to litigants, it has also resulted in a number of negative effects. These are: higher cost of litigation, longer dispute resolution processes and the possibility of inconsistent or conflicting judicial rulings. Besides, forum shopping will compromise predictability and fairness of the legal system, as the outcomes can be determined by the selected jurisdiction rather than by the substantive merits of the case.

In worst-case scenarios, cross-border litigation in different jurisdictions can lead to conflicting decisions, which will cause additional enforcement and compliance problems.

3.4 Limitations of Private International Law

Conflict of laws, also called private international law, is a concept used to establish the law and the appropriate forum that should be used to resolve a dispute involving jurisdiction. Historical rules such as *lex loci delicti* (the law of the place where the harm was caused) and *lex fori* (the law of the forum) have traditionally been followed by courts when dealing with cross-border cases.

Yet, these rules are progressively becoming insufficient regarding the case of AI-generated trade secrets¹⁰. The decentralized and borderless character of the AI systems makes it hard to determine where exactly in the wrongful act or harm the wrongful act occurred. Misappropriation, as an example, could include unauthorized access to data that is stored in several jurisdictions at the same time and making the concept of the place of harm a single concept irrelevant.

¹⁰ Kazimi, J. (2025). AI Algorithms and Trade Secrets: a Legal Exploration of Intellectual Property Rights. *Legal Issues in the digital Age*, (4), 25-38

Also, the tangible, location-based disputes were in mind when developing the private international law frameworks and were inadequate when addressing the complexities of digital environments. Consequently, it is frequently difficult to consistently apply these principles to the cases involving AI.

The inability of the current rules on conflict-of-law to resolve all of these problems underscores the importance of new legal strategies that can be used to address all of these issues effectively.

This can involve creation of specific jurisdictional regulations of digital assets and more global cooperation to promote legal uniformity¹¹.

4. ENFORCEMENT ISSUES IN AI-GENERATED TRADE SECRET DISPUTES

This has made the establishment of trade secret rights a more complicated matter in the domain of Artificial Intelligence (AI). Although the challenges in traditional trade secret disputes already present evidentiary and procedural challenges, the introduction of AI technologies adds another layer of difficulty because of the digital, decentralized, and opaque nature of AI-generated information. These difficulties are further complicated by cross-border dimensions because enforcement mechanisms have to be applied to different legal systems that have different standards. This subpart critically looks at the main issues with enforcement related to AI-generated trade secret cases.

4.1 Evidentiary Challenges

The difficulty in the enforcement of trade secret rights is one of the most critical as there must be enough evidence of an act of misappropriation. With AI-generated trade secrets, the aspect of evidentiary concerns is especially acute because of the complexity of the algorithm system inherent. AI models, in particular, deep learning-based ones, can appear as black box, and it can be challenging to understand the processes that go on inside the black box, and what parts of the black box qualify as confidential information.

Besides, it is highly challenging to trace the origin and flow of data utilized by the AI systems. Information can be handled by different jurisdictions and different intermediaries which makes it difficult

¹¹ Khan, A. (2024). The intersection of artificial intelligence and international trade laws: Challenges and opportunities. *IIUMLJ*, 32, 103.

to have a clear chain of custody. The absence of transparency in AI operations also hinders the possibility of proving unauthorized access, use, or disclosure of trade secrets. Consequently, the plaintiffs might have difficulties in fulfilling the burden of proof that one is expected to produce during the legal process.

4.2 Digital Replicability

The first characteristic of AI-generated trade secrets is that they are in digital form that can be instantly copied and spread. Digital information unlike physical assets can be copied without loss of quality and be distributed all over the world within a few seconds. The ease with which it can be replicated goes a long way in compromising the effectiveness of the traditional enforcement mechanisms¹².

When a trade secret is stolen and leaked out, it grows extremely hard to withstand or recover the harm. The legal solutions like injunctions may not work as the information may be widely spread and the application of such measures may become futile. Enforcement efforts are therefore usually aimed at minimizing damages than completely restoring the exclusivity of the trade secret.

4.3 Cross-Border Enforcement of Judgments

Application of the judicial rulings internationally is still a significant challenge in the cross-border trade secret cases. Although domestic courts can make positive rulings, it will be ineffective unless it is recognized and enforced in other jurisdictions. The bilateral treaties, domestic procedural laws, and reciprocity principles usually govern this process.

Regardless, there is no universally accepted framework, on which foreign judgments in cases involving trade secrets are enforced. Such disparities in legal norms, procedural prerequisites, as well as public policy considerations, may result in refusal of enforcement in some jurisdictions. This inconsistency undermines the deterrent impact of legal remedies and creates confusion to the rights holders in seeking protection of their AI-generated trade secrets on a global level.

¹² Kovács, G. (2025). AI Act and IPR Enforcement: The European Regulatory Framework and Practical Challenges. HUNGARIAN YEARBOOK OF INTERNATIONAL LAW AND EUROPEAN LAW, 13(1), 105-122.

4.4 Conflict with Data Protection Laws

The protection of the rights to trade secrets can also be in conflict with the rules of information protection and privacy. Legal regulations like the General Data Protection Regulation place serious conditions on the processing, transfer, and collection of personal data. In some situations, access to, or disclosure of information required to demonstrate misappropriation of trade secrets may be in contravention of such rules.

As an illustration, access to evidence stored in a different jurisdiction might be conditioned by the need to comply with the specific laws of the data protection in the particular jurisdiction, which can limit cross-border data transfers¹³. This raises a conflict between the necessity to protect the rights to trade secrets and the necessity to consider individual privacy. To manage this conflict, it is essential to carefully balance competing legal interests, which can lead to procedural delays and higher compliance costs.

4.5 Cybersecurity Risks

The vulnerability of cybersecurity is a major threat to the security and enforcement of trade secrets generated by AI. Poor or lax security controls may leave sensitive data vulnerable to unauthorized access, computer attacks, and industrial espionage. Since the outputs of AI-generated are highly valued, they are frequently the main targets of malicious individuals.

Moreover, breach of cybersecurity may complicate the enforcing process because it can be difficult to identify the origin and the scope of misappropriation. In most instances, there may be a number of parties to consider such as hacker, competitors or even insiders hence making liability and legal accountability difficult. Enforcement therefore demands both a good legal system and effective technical controls so that it can prevent unauthorized access in the first place.

5. COMPARATIVE LEGAL ANALYSIS

The law of trade secrets, and their protection, differ widely across jurisdictions, because of differences in legal traditions, policy priorities, and the level of technological development. These differences are

¹³ Malekela, M. S. A. (2025). AI and Confidentiality protection in International Commercial Arbitration: Analysis of the existing legal framework. *Discover Artificial Intelligence*, 5(1), 83.

amplified in the case of autonomous systems and cross-border data flows, where existing frameworks find it hard to accommodate the complexities generated by autonomous systems and cross-border data flows. The section is a comparative study of the leading jurisdictions, their strength, weaknesses and the implication of this to the harmonization of the laws of various jurisdictions around the world.

5.1 United States

The United States has provided one of the most robust and comprehensive legal regimes to protect trade secrets¹⁴. The passage of the Defend Trade Secrets Act (DTSA) was a major event as it provided a federal cause of action in cases of trade secret misappropriation. The DTSA has effective remedies such as injunctions, damages, and in severe instances ex parte seizure of property to prevent leakage of trade secrets.

Another interesting aspect of the U.S. system is its readiness to enforce the trade secret laws extraterritorially, especially when there is a sufficient nexus to U.S. commerce. The U.S. legal framework is comparatively well-prepared to deal with AI-related conflicts.

Nevertheless, there are issues related to the definition of ownership of AI-generated output, the balancing of trade secret protection with other regulatory imperatives, like data privacy and competition law.

5.2 European Union

The EU has attempted to harmonize protection of trade secrets through the EU Trade Secrets Directive, which introduces a common legal framework across the member states. The Directive provides a definition of trade secrets, outlines unlawful acquisition and use of trade secrets, and provides remedies such as injunctions and damages.

This harmonization endeavor notwithstanding, there exist substantial differences between the application and enforcement of the trade secret laws among the member states. The interpretations of the laws, the procedures and the evidentiary requirements vary, and thus, the results of the law are inconsistent.

¹⁴ Oforleta, C. (2025). Reassessing Trade Secret Protections in the Era of AI: A Comparative Perspective on Legal and Ethical Challenges. Available at SSRN 5143353.

Also, there is a high level of emphasis on data protection and privacy especially within the framework of GDPR. Although this solution helps protect individual rights, it can also hinder the availability of evidence in trade secrets cases involving AI systems. The EU model is therefore a continued attempt to strike a balance between innovation, competition and fundamental rights although such balance can make enforcement in a cross-border scenario difficult.

5.3 India

There is no specific statute that regulates trade secret in India; however, a mixture of civil law, fair trade, and judicial law was applied. Common law measures to protect trade secrets usually include non-disclosure agreement (NDA) or confidentiality terms, or breach of trust proceedings.

And some of the provisions of trade secret protection overlap with the Information Technology Act, 2000, especially in the instances of data theft or unauthorized access to computer systems. Nonetheless, the lack of a functional legislative framework leaves huge gaps, particularly in resolving technologically challenging cases, including those involving AI-generated outputs.

Another challenge that the Indian legal system is grappling with is evidentiary standards issues, delays in enforcing the law and lack of judicial expertise in dealing with advanced technological matters. With the growing use of AI, the inability to establish a clear statutory regime can disrupt the successful protection of trade secrets and discourage investments based on innovation.

5.4 China

China has gone a long way in enhancing its trade secret protection regime especially with the amendments to its Anti-Unfair Competition Law¹⁵. These reforms have broadened the definition of trade secrets, enhanced penalties in case of misappropriation and enforcement has been improved.

The way that China has been doing it is an indication that it is increasingly realizing the role of protecting intellectual property in terms of encouraging innovation and bringing in foreign investment. Courts are

¹⁵ Okunola, C. (2025). Beyond Secrecy: Evaluating the Limits of Trade Secret Law as a Framework for Artificial Intelligence Protection in a Globalized Data Economy. Available at SSRN 5578590.

now more involving in resolving trade secret cases, and this has included cases involving digital technologies.

Nonetheless, the difficulties still lie in the provision of uniform implementation in various areas. The difference in the capacity of judicial system, domestic protectionism, and administrative practices can cause disparity in the enforcement of law. Moreover, the issues of transparency and predictability remain a concern to the attitude toward the Chinese legal system in cross-border cases.

5.5 Need for Harmonization

The comparative analysis shows that there are major differences in the legal treatment of trade secrets across jurisdictions, especially in the context of AI-generated outputs. These disparities lead to uncertainty, heightens risk of litigation, and makes it more difficult to enforce rights in cross-border disputes.

With the prominently global essence of AI technologies, the internationalization of the trade secret laws is urgently required. A single framework would provide some commonality in defining trade secrets, establishing ownership and overcoming jurisdictional issues. It may as well enable the realization and implementation of cross-border judgments, which increases legal predictability and minimizes the transaction costs.

Inter-country collaborations such as the World Intellectual Property Organization and multilateral treaties might be instrumental in the creation of such a framework. In the absence of co-ordinated action, the current fragmentation of legal regimes will remain in the way of effective protection of AI-generated trade secrets in the global digital economy.

6. CONCLUSION AND RECOMMENDATIONS

The emergence of AI-generated trade secrets is a major change in the intellectual property law landscape, presenting new challenges when it comes to cross-border contexts. Their digital and decentralized nature makes it harder to determine who can enforce the law, as well as undermining the traditional methods of enforcement. Current legal regimes, mostly created to deal with trade secrets that are generated by humans and are territorially located, are inadequate to respond to these new complexities.

In addition, the lack of harmonized international standards leads to greater legal uncertainty and makes it hard to provide businesses with effective protection of their proprietary information. There is an increasing necessity of adaptive, coherent and globally coordinated legal strategies, to assure the adequate protection and encourage innovation.

- **International Guidelines:** Trade secret challenges related to AI should also be addressed at the international level through the establishment of a global framework to combat them. □
Harmonize Trade Secret Laws: National harmonization can help reduce jurisdictional conflicts and enhance uniformity in terms of legal responses.
- **Promote ADR Mechanisms:** Arbitration and mediation should be encouraged to allow resolving of cross-border disputes faster and more efficiently.
- **Use Technological Solutions:** Technologies like blockchain can be used to improve tracking, security and transparency of trade secrets.
- **Strengthen Cybersecurity and Ownership Clarity:** To ensure that no controversy arises, improved cybersecurity approaches and legal clarity about who owns AI-generated output are necessary.

REFERENCES

1. Abad, A. A. (2024). Artificial intelligence and the future of international trade law and dispute settlement. *Contemp. Asia Arb. J.*, 17, 35.
2. Bhushan, T., & Tahiru, H. A. (2025). Protecting AI-generated inventions under the UK's IP regulatory regime. *Journal of Intellectual Property Rights*, 30(1), 86-100.
3. Celestin, P. (2024). The Future Of Intellectual Property Law In The Digital Age: How Companies Are Protecting Their Innovations In A Globalized Market. *Brainae Journal of Business, Sciences and Technology*.
4. Crouch, D. (2024). Using intellectual property to regulate artificial intelligence. *Mo. L. Rev.*, 89, 781.
5. Dave, E., Mishra, R., & Yadav, A. (2025). AI Regulation and Governance: Comparative Analysis of Legal Frameworks Across Jurisdictions.
6. Dhabu, A. C. (2024). Legal implications of artificial intelligence in cross-border transactionsnavigating international trade law.
7. Du, J. Y., & Li, P. Y. (2025, May). Legal Regulation of Knowledge Distillation: From a Trade Secret Perspective. In *JSAI International Symposium on Artificial Intelligence* (pp. 36-48). Singapore: Springer Nature Singapore.
8. Hazarika, K., & Saikia, B. ADR in Commercial and Business Disputes: Corporate Strategies, AI Integration and Cross-Border Considerations.
9. Kalwani, M. (2024). 17 Navigating Challenges and Proposing Solutions. *Intellectual Property Rights and Competition Law in India*.
10. Kazimi, J. (2025). AI Algorithms and Trade Secrets: a Legal Exploration of Intellectual Property Rights. *Legal Issues in the digital Age*, (4), 25-38.
11. Khan, A. (2024). The intersection of artificial intelligence and international trade laws: Challenges and opportunities. *IIUMLJ*, 32, 103.

12. Kovács, G. (2025). AI Act and IPR Enforcement: The European Regulatory Framework and Practical Challenges. *HUNGARIAN YEARBOOK OF INTERNATIONAL LAW AND EUROPEAN LAW*, 13(1), 105-122.
13. Malekela, M. S. A. (2025). AI and Confidentiality protection in International Commercial Arbitration: Analysis of the existing legal framework. *Discover Artificial Intelligence*, 5(1), 83.
14. Oforleta, C. (2025). Reassessing Trade Secret Protections in the Era of AI: A Comparative Perspective on Legal and Ethical Challenges. *Available at SSRN 5143353*.
15. Okunola, C. (2025). Beyond Secrecy: Evaluating the Limits of Trade Secret Law as a Framework for Artificial Intelligence Protection in a Globalized Data Economy. *Available at SSRN 5578590*.